

California Regional Water Quality Control Board
North Coast Region

Order No. R1-2003-0045
NPDES Permit No. CA0024449
I.D. No. 1B82151OHUM

WASTE DISCHARGE REQUIREMENTS

FOR

CITY OF EUREKA
GREATER EUREKA AREA, ELK RIVER WASTEWATER TREATMENT FACILITY

Humboldt County

The California Regional Water Quality Control Board, North Coast Region, (hereinafter Regional Water Board) finds that:

1. The City of Eureka (hereinafter Permittee) submitted a Report of Waste Discharge, dated August 22, 2002, requesting renewal of its Permit to discharge treated and disinfected municipal wastewater from the Greater Eureka Area, Elk River Wastewater Treatment Facility (WWTF), located at 4301 Hilfiker Lane in the City of Eureka, California to Humboldt Bay. Current Waste Discharge Requirements are contained in Order No. 98-9, adopted by the Regional Water Board on February 26, 1998.
2. The Elk River WWTF serves both the City of Eureka and the surrounding unincorporated areas within the Humboldt Community Services District (HCSD). The WWTF discharges secondary-treated domestic wastewater into Humboldt Bay, a water of the United States, through Outfall No. 001 at Latitude 40° 46' 24" North and Longitude 124° 12' 45" West. The WWTF is located in portions of the West ½ of the Southwest ¼ of Section 33, T5N, R1W and portions of the West ½ of Section 4, T4N, R1W, HB&M.
3. The Elk River WWTF is designed for a dry weather flow of 5.24 million gallons per day (mgd) and a wet weather flow of 32 mgd. Secondary treatment is provided for all flows up to 12 mgd. Flows between 12 and 32 mgd, which result from inflow and infiltration during the winter rainy season, receive only primary treatment. The primary and secondary flows, when combined, meet the effluent limits contained in this Permit.
4. Treatment at the Elk River WWTF consists of grit removal, primary clarification, trickling filters, secondary clarification, chlorination and dechlorination. Treated wastewater is contained in an effluent holding pond and discharged to Humboldt Bay via an outfall line which terminates at the east side of the shipping channel near Channel Marker No. 12. During periods of high influent flows, the WWTF has the ability to direct overflow from the effluent holding pond to a temporary holding marsh. When flows subside, water is pumped from the marsh back into the holding pond.

The outfall is 48 inches in diameter by 4,100 feet long and provides an initial dilution of 30 to 1. Discharge occurs only at ebb tide to assure that effluent is conveyed to the Pacific Ocean. Solids are treated by anaerobic digestion and stored in two facultative lagoons. In summer months, sludge is dredged from the lagoons and transported by tanker truck to a 98-acre parcel owned by the Permittee and spread and disked into soil at an agronomic rate adjusted to balance nitrogen addition with its uptake by pasture grass.

5. In April 1980, with adoption of Resolution No. 80-10, the Regional Water Board recognized the ebb tide discharge concept as a viable alternative to an ocean outfall as a means of implementing the Water Quality Control Policy for the Enclosed Bays and Estuaries of California. With adoption of Resolution No. 80-87, the State Water Resources Control Board (State Water Board), found the concept to be consistent with the Policy
6. The WWTF receives wastewater from industrial discharges and a pretreatment program to control discharges of industrial wastes is required by this Permit. A pretreatment program, developed in conformance with 40 CFR Part 403, was approved on January 7, 1983 and was subsequently revised.
7. The facility is a major discharger, as defined by the U.S. Environmental Protection Agency (U.S. EPA).
8. The Water Quality Control Plan for the North Coast Region (Basin Plan) includes: beneficial uses; water quality objectives; implementation plans for point source and nonpoint source discharges; prohibitions, and; statewide plans and policies. For the protection and enhancement of ocean water quality, the Basin Plan adopts, by reference, the provisions of the State Water Board's Water Quality Control Plan for Ocean Waters of California (Ocean Plan).
9. The Ocean Plan establishes beneficial uses and water quality objectives for waters of the Pacific Ocean adjacent to the California coast, outside of enclosed bays, estuaries, and coastal lagoons. Water quality objectives include the bacterial, physical, chemical, biological, and radiological characteristics of ocean waters, and include numeric standards for priority pollutants and toxicity to ensure the reasonable protection of beneficial uses and the prevention of nuisance. This Order is based on the objectives contained in the Ocean Plan, in conformance with Resolution No. 80-10, which recognizes the ebb tide discharge as being a viable alternative to an ocean outfall. The outfall location and the timing of discharges ensures that effluent is discharged to the Pacific Ocean without return to the Bay. Compliance with effluent limits contained in the Order provide reasonable assurance that receiving water standards are being met. Therefore, the monitoring program contained in this Permit does not include routine receiving water monitoring.

10. The beneficial uses of ocean waters of the State of California are:
 - a. industrial service supply
 - b. industrial process supply
 - c. navigation
 - d. water contact recreation
 - e. noncontact recreation, including aesthetic enjoyment
 - f. commercial and sport fishing
 - g. mariculture
 - h. preservation and enhancement of designated Areas of Special Biological Significance
 - i. habitat for rare, threatened, and endangered species
 - j. marine habitat
 - k. wildlife habitat
 - l. migration of aquatic organisms
 - m. fish spawning
 - n. shellfish harvesting
11. The Permittee has eliminated storm water discharges associated with industrial activities – Category IX, as defined in 40 CFR Section 122.26 (b) (14). These discharges are routed to the headworks of the WWTF and are commingled with influent municipal wastewater.
12. The WWTF is located in a degraded wetland habitat area, as allowed by Special Legislation, Chapter 1109, Statutes of 1980. This legislation allowed the construction of the treatment works within the wetland area in concert with restoration and other habitat improvements as a means of improving the water quality of Humboldt Bay, while ensuring restoration and enhancement of habitat values, and to provide technical information for evaluating projects utilizing treated wastewater for wetlands enhancement. The Department of Fish and Game, as directed by SB 1922, has prepared a Wildlife Management Plan for this area, now known as the Elk River Wildlife Management Area.
13. The Elk River Wildlife Management Area consists of approximately 139 acres and is owned by the Permittee. The Permittee manages the area under the direction of the Department of Fish and Game. The Permittee completed construction of the Elk River Facility and the mitigation area in 1984. Since that time, the mitigation area has been operated and maintained to the satisfaction of the Department of Fish and Game.
14. Effluent limitations and toxic and pretreatment effluent standards established pursuant to Sections 208 (b), 301, 302, 303 (d), 304, 306, 307, and 403 of the Clean Water Act and amendments thereto are applicable to the Permittee.
15. The permitted discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California. The impacts of the permitted discharge on existing water quality will be insignificant.

16. The action to renew an NPDES Permit is exempt from Chapter 3 of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.) in accordance with Section 13389 of the California Water Code [CWC] and Title 14 of the California Code of Regulations, Section 15301, as an activity involving the permitting of an existing facility that involves negligible or no expansion of an existing use.
17. The Regional Water Board has notified the Permittee and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided opportunity to submit written comments pertaining to the discharge.
18. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.
19. This Order will serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act and amendments thereto and will take effect upon its adoption by the Regional Water Board.

THEREFORE, IT IS HEREBY ORDERED that Waste Discharge Requirements Order No. 98-9 is rescinded and the Permittee, in order to meet the provisions of Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. DISCHARGE PROHIBITIONS

1. The discharge of waste to Humboldt Bay is prohibited unless it is done in such a manner to assure that all wastewater is conveyed to the mouth of the Bay and dispersed in the Pacific Ocean during periods of ebb tide.
2. The discharge of any waste not specifically regulated by this Permit is prohibited.
3. Creation of pollution, contamination, or nuisance, as defined by Section 13050 of the California Water Code, is prohibited.
4. The discharge of sludge or digester supernatant is prohibited, except as authorized under Section **E. SOLIDS DISPOSAL AND HANDLING REQUIREMENTS**.
5. The discharge of untreated or partially treated waste from anywhere within the collection, treatment, or disposal system is prohibited.
6. The discharge of waste to the Elk River or its tributaries, including discharges from any marsh overflow area that has received wastewater, is prohibited.
7. The average dry weather flow through the WWTF shall not exceed 5.24 mgd averaged over a calendar month. Peak wet weather flows through the WWTF shall not exceed 32.0 mgd.

B. EFFLUENT LIMITATIONS

- Representative samples of the discharge to the Pacific Ocean shall not contain constituents in excess of the following limitations (Table A and Table B):

TABLE A

	Units	Monthly Average ^a	Weekly Average ^b	Daily Maximum
BOD ₅	mg/l	30	45	60
	lb/day ^c	1313	1969	2625
	lb/day ^d	3002	4503	6005
Suspended Solids	mg/l	30	45	60
	lb/day ^c	1313	1969	2625
	lb/day ^d	3002	4503	6005
Settleable Solids	ml/l	0.1	---	0.2
Fecal Coliform	MPN/100 ml	14 ^e	---	43 ^f
pH	std. units	Not less than 6.0 or greater than 9.0		
Turbidity	NTU	75	100	225
Grease and Oil	mg/l	15	---	20

^a The arithmetic mean of the values for effluent samples collected in a period of 30 consecutive days.

^b The arithmetic mean of the values for effluent samples collected in a period of seven consecutive days.

^c the daily discharge (lbs/day) is obtained from the following calculation on any calendar day:

$$\text{Daily Discharge (lbs/day)} = \frac{8.34}{N} \sum_{i=1}^N Q_i C_i$$

in which N is the number of samples analyzed in any calendar day. Q_i and C_i are the flow rate (mgd) and the constituent concentration, respectively, which are associated with each of the N grab samples that may be taken in any calendar day. If a composite sample is taken, C_i is the concentration measured in the composite sample; and Q_i is the average flow rate occurring during the period over which samples are composited.

^d The mass emission limitations apply during periods of high inflow/infiltration, when flow to the WWTF exceeds 5.24 mgd for the limitation period (daily, weekly, or monthly).

^e Median

^f Not more than 10 percent of the samples collected in a 30 day period shall exceed 43 MPN/100 ml.

TABLE B
Limitations For Protection of Marine Aquatic Life

	Units	6 Month Median ^a	Daily Maximum ^b	Instantaneous Maximum ^c
Arsenic	µg/l	158	902	2,390
Cadmium	µg/l	31	124	310
Chromium (hexavalent) ^d	µg/l	60	248	620
Copper	µg/l	33	312	870
Lead	µg/l	62	248	630
Mercury	µg/l	1.2	4.9	12.4
Nickel	µg/l	155	620	1,550
Selenium	µg/l	465	1,860	4,650
Silver	µg/l	16.7	79	212
Zinc	µg/l	380	2,240	5,960
Cyanide ^e	µg/l	31	124	310
Ammonia	µg/l N	18,600	74,400	186,000
Acute Toxicity ^g	TUa	N/A	1.2	N/A
Chronic Toxicity	TUc	N/A	31	N/A
Non-Chlorinated Phenolic Compounds	µg/l	930	3,720	9,300
Chlorinated Phenolics	µg/l	31	124	310
Endosulfan	µg/l	0.3	0.6	0.8
Endrin	µg/l	.06	0.1	0.2
HCH	µg/l	0.1	0.3	0.4
Radioactivity	Not to exceed limits specified in Table 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30253 of the California Code of Regulations. Limits for radioactivity in Section 30253 shall apply directly to the undiluted waste effluent. Reference to Section 30253 is prospective, including future changes to any incorporated provisions of federal law, as the changes take effect.			

^a The 6 month median shall apply as a moving median of daily values for any 180-day period in which daily values represent flow weighted average concentrations within a 24-hour period. For intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred. If only one sample is collected during the 180-day period, the single measurement shall be used to determine compliance with the effluent limitation for the entire time period.

^b The daily maximum shall apply to flow weighted 2- hour composite samples.

^c The instantaneous maximum shall apply to grab sample determinations.

^d Permittees may meet this limit as a total chromium limit.

^e If a Permittee can demonstrate to the satisfaction of the Regional Board (subject to EPA approval) that an analytical method is available to reliably distinguish between strongly and weakly complexed cyanide, effluent limitations for cyanide may be met by the combined measurement of free cyanide, simple alkali metal cyanides, and weakly complexed organometallic cyanide complexes. In order for the analytical method to be acceptable, the recovery of free cyanide from metal complexes must be comparable to that achieved by the approved method in 40 CFR Part 136, as revised May 14, 1999.

^g The Ocean Plan (2001) requires that the mixing zone for the acute toxicity objective be 10 percent of the distance from the edge of the outfall structure to the edge of the chronic mixing zone. The effluent limitation for acute toxicity is thus determined by the following equation ...

$C_e = C_a + (0.1) (D_m) (C_a)$, where C_a = the water quality objective to be met at the edge of the acute mixing zone and D_m = the minimum probable initial dilution (here, $D_m = 30$).

TABLE B (Continued)

Limitations For Protection of Human Health – Noncarcinogens

Chemical	Units	30-Day Average	
		Decimal Notation	Scientific Notation
acrolein	µg/l	6,800	6.8×10^3
antimony	µg/l	37,000	3.7×10^4
bis (2-chloroethoxy) methane	µg/l	140	1.4×10^2
bis (2-chloroisopropyl) ether	µg/l	37,000	3.7×10^4
chlorobenzene	µg/l	18,000	1.8×10^4
chromium (trivalent)	µg/l	5,900,000	5.9×10^6
di-n-butyl phthalate	µg/l	110,000	1.1×10^5
dichlorobenzenes	µg/l	160,000	1.6×10^5
diethyl phthalate	µg/l	1,000,000	1×10^6
dimethyl phthalate	µg/l	25,000,000	2.5×10^7
4,6-dinitro-2-methylphenol	µg/l	6,800	6.8×10^3
2,4-dinitrophenol	µg/l	120	1.2×10^2
ethylbenzene	µg/l	130,000	1.3×10^5
fluoranthene	µg/l	470	4.7×10^2
hexachlorocyclopentadiene	µg/l	1,800	1.8×10^3
nitrobenzene	µg/l	150	1.5×10^2
thallium	µg/l	62	6.2×10^1
toluene	µg/l	2,600,000	2.6×10^6
1,1,1-trichloroethane	µg/l	16,000,000	1.6×10^7
tributyltin	µg/l	.04	4×10^{-2}

TABLE B (Continued)

Limitations For Protection of Human Health – Carcinogens

Chemical	Units	30-Day Average	
		Decimal Notation	Scientific Notation
acrylonitrile	µg/l	3.1	3.1×10^0
aldrin	µg/l	.00068	6.8×10^{-4}
benzene	µg/l	180	1.8×10^2
benzidine	µg/l	.0021	2.1×10^{-3}
beryllium	µg/l	1.0	1×10^0
bis (2-chloroethyl) ether	µg/l	1.4	1.4×10^0
bis (2-ethylhexyl) phthalate	µg/l	110	1.1×10^2
carbon tetrachloride	µg/l	28	2.8×10^1
chlordane	µg/l	.00071	7.1×10^{-4}
chlorodibromomethane	µg/l	266	2.66×10^2
chloroform	µg/l	4,000	4×10^3
DDT	µg/l	.0053	5.3×10^{-3}
1,4-dichlorobenzene	µg/l	560	5.6×10^2
3,3-dichlorobenzidine	µg/l	.25	2.5×10^{-1}
1,2-dichloroethane	µg/l	868	8.68×10^2
1,1-dichloroethylene	µg/l	27	2.7×10^1

Chemical	Units	30-Day Average	
		Decimal Notation	Scientific Notation
dichlorobromomethane	µg/l	192	1.92×10^2
dichloromethane	µg/l	14,000	1.4×10^4
1,3-dichloropropene	µg/l	280	2.8×10^2
dieldrin	µg/l	.0012	1.2×10^{-3}
2,4-dinitrotoluene	µg/l	81	8.1×10^1
1,2-diphenylhydrazine	µg/l	5.0	5×10^0
halomethanes	µg/l	4,000	4×10^3
heptachlor	µg/l	.0015	1.5×10^{-3}
heptachlor epoxide	µg/l	.0006	6×10^{-4}
hexachlorobenzene	µg/l	.007	7×10^{-3}
hexachlorobutadiene	µg/l	430	4.3×10^2
hexachloroethane	µg/l	78	7.8×10^1
isophorone	µg/l	22,600	2.26×10^4
N-nitrosodimethylamine	µg/l	230	2.3×10^2
N-nitrosodi-N-propylamine	µg/l	11.7	1.17×10^1
N-nitrosodiphenylamine	µg/l	78	7.8×10^1
PAHs	µg/l	.27	2.7×10^{-1}
PCBs	µg/l	.00059	5.9×10^{-4}
TCDD equivalents	µg/l	.00000012	1.2×10^{-7}
1,1,2,2-tetrachloroethane	µg/l	71	7.1×10^1
tetrachloroethylene	µg/l	62	6.2×10^1
toxaphene	µg/l	.007	7×10^{-3}
trichloroethylene	µg/l	840	8.4×10^2
1,1,2-trichloroethane	µg/l	291	2.91×10^2
2,4,6-trichlorophenol	µg/l	9	9×10^0
vinyl chloride	µg/l	1,100	1.1×10^3

2. Each effluent concentration limitation contained in Table B, above, shall have a corresponding mass emission limitation derived by the following general formula:

Mass emission limitation (lbs/day) = .00834 x Ce x Q ... where:

Ce = the effluent concentration limitation µg/l ... and

Q = flow rate (mgd) corresponding to the Ce time period (i.e., 24 hours, 30 days, 6 months, or the flow rate at the time of grab sample collection)

3. The average percent removal of BOD and suspended solids in any consecutive 30-day period shall not be less than 85 percent, as determined by analysis of influent and effluent samples collected at approximately the same time.
4. A minimum chlorine residual of 1.5 mg/l shall be maintained at the end of the disinfection process. There shall be no detectable levels of chlorine discharged to the wildlife management area or the receiving waters, using a minimum detection limit of 0.1 mg/l.

C. COPPER SOURCE IDENTIFICATION AND CONTROL PROGRAM

By **September 31, 2003**, the Permittee shall develop and implement a Source Identification and Control Program for copper. The program shall include specific steps to identify potential sources of copper and to control copper discharges to assure compliance with effluent limitations of Table B.

D. RECEIVING WATER LIMITATIONS

1. General Standards

- a. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Water Board or the State Water Board or by the U.S. EPA.
- b. The waste management systems, which result in the discharge to the ocean, must be designed and operated in a manner that will maintain the indigenous marine life, a healthy and diverse marine community, and protect, or enhance, recreational beneficial uses in, and out of, the water.
- c. Waste discharged to the ocean must be essentially free of:
 - i. Material that is floatable or will become floatable upon discharge.
 - ii. Settleable material or substances that may form sediments that will degrade benthic communities or other aquatic life.
 - iii. Substances that will accumulate to toxic levels in marine waters, sediments, or biota.
 - iv. Substances that significantly decrease the natural light to benthic communities and other marine life.
 - v. Materials that result in aesthetically undesirable discoloration of the ocean surface.
 - vi. WWTF effluent shall be discharged in a manner that provides sufficient initial dilution to minimize the concentrations of substances not removed by treatment and prevents discharge, or return of, effluent to Humboldt Bay.

2. After initial dilution, as defined by the Ocean Plan, the discharge of waste shall not cause a nuisance or adversely affect beneficial uses or cause violation of the water quality objectives for ocean waters contained below:

a Bacterial Characteristics

i. Water-contact Standards

Within 1,000 feet of the shoreline or within the 30 foot depth contour line, and in areas outside of this zone where water contact recreation occurs, as determined by the Regional Water Board, and in all kelp beds, the following bacterial objectives shall be maintained throughout the water column:

- (A) Total coliform bacteria shall not exceed 1,000 organisms per 100 ml, provided that not more than 20 percent of samples from any sampling station exceed 1,000 per 100 ml in any 30 day period, and providing that no single sample, when verified by a repeat sample taken within 48 hours, shall exceed 10,000 per ml.
- (B) Based on a minimum of five samples for a 30-day period, the fecal coliform density shall not exceed a geometric mean of 200 organisms per 100 ml, and no more than 10 percent of the total samples shall exceed 400 per 100 ml in any 60-day period.

ii. Shellfish Harvesting Standards

At all areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the following bacterial objectives shall be maintained throughout the water column:

The median total coliform density shall not exceed 70 organisms per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

b. Physical Characteristics

- i. The discharge shall not cause floating particulates and grease and oil to be visible.
- ii. The discharge shall not cause aesthetically undesirable discoloration of the ocean surface.
- iii. Natural light shall not be significantly reduced at any point outside the initial dilution zone as the result of the discharge of waste.
- iv. As a result of the discharge, the rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.

c. Chemical Characteristics

- i. The discharge must not cause the dissolved oxygen concentration to be depressed more than 10 percent from that which occurs naturally.
- ii. The discharge must not cause the pH of the receiving waters to be changed at any time more than 0.2 units from that which occurs naturally.
- iii. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
- iv. The concentration of substances set forth in Table B of this Order shall not be increased in marine sediments to levels that would degrade marine life.

- v. The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life.
 - vi. Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota.
- d. Biological Characteristics
 - i. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
 - ii. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.
 - iii. The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.
- e. Radioactivity

The discharge of radioactive waste shall not degrade marine life.

E. SOLIDS DISPOSAL AND HANDLING REQUIREMENTS

- 1. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of at a legal point of disposal, or beneficially reused, in accordance with 40 CFR Parts 257, 258, 501, and 503; the State Water Board promulgated provisions of Title 27, Division 2, of the California Code of Regulations, and; with the Ocean Plan. If the Permittee desires to dispose of solids or sludge by a different method, a request for Permit modification shall be submitted to the U.S. EPA and the Regional Water Board at least 180 days before initiating the alternative disposal method.
- 2. Sludge stored beyond two years may be regulated as a waste pile or surface impoundment under Title 27, Division 2 of the California Code of Regulations.
- 3. The Permittee is encouraged to comply with the State guidance manual issued by the Department of Health Services titled "Manual of Good Practice for Land Spreading of Sewage Sludge."
- 4. Disposal of sludge at the land disposal site shown on Attachment A shall be accomplished within the following limits:
 - a. The pH of the soil (top 12 inches) within the sludge application area shall be maintained at 6.5 or above at the time of its application;

- b. The annual loading rate for nitrogen (N) shall not exceed the crop's uptake rates. ;
- c. The annual loading rate for cadmium (Cd) shall not exceed 0.45 pounds per acre;
- d. The cumulative limit for metals within the sludge application area shall not exceed the following:

Sludge Application Metals Limitations (lbs/acre)			
	<u>Soil Cation Exchange Capacity (meq/100 grams)</u>		
	< 5	5 – 15 ^a	> 15
Lead	500	1,000	2,000
Zinc	250	500	1,000
Copper	---	---	---
Nickel	---	---	---
Cadmium	---	---	---

^a Interpolation should be used to obtain values in the CEC range of 5 – 15, soil pH must be maintained at pH 6.5 or above.

- e. When the cumulative limit for any metal shown in (d), above, is reached, use of the sludge application site shall be terminated;
- f. Sludge application shall be limited to the dry season of the year, which, for purposes of this Permit, is defined as May 1 to October 15. This period may be extended by the Executive Officer, if it can be demonstrated by groundwater level monitoring that a two-foot separation between the disposal level and the saturation level exists. When ground water levels encroach on the two-foot separation, sludge application shall cease. Sludge shall be covered during or immediately after application to prevent odors;
- g. The discharge of sludge to surface drainages is prohibited;
- h. The Permittee shall update the operations and management plan and include as a minimum the following:
 - i. Documentation that the treated sludge is adequately stabilized and monitored to meet the requirements of land disposal;
 - ii. Documentation that the operation, management, and maintenance of the sludge transport system is adequate to minimize potential nuisance and health problems;
 - iii. Documentation that the design, management, and maintenance of the sludge application site and equipment is adequate to minimize potential nuisances, health and water quality problems;

- iv. Adequate record keeping to document the timing, locations, quantities and quality of the sludge applications;
 - v. Monitoring and reporting (see attached Monitoring and Reporting Program).
- 5. All the requirements in 40 CFR 503 are enforceable by U.S. EPA whether or not they are stated in an NPDES Permit or other Permit issued to the Permittee. The Regional Water Board should be copied on relevant correspondence and reports forwarded to the U.S. EPA regarding sludge management practices.
- 6. The Permittee is responsible for ensuring compliance with these regulations whether the Permittee uses or disposes of the sludge itself or contracts with another party for further treatment, use, or disposal. The Permittee is responsible for informing subsequent preparers, applicers, and disposers of their requirements under 40 CFR Parts 257, 258, and 503.
- 7. The Permittee shall take all reasonable steps to prevent and minimize sludge use or disposal, in violation of this Order, that has a likelihood of adversely affecting human health or the environment.
- 8. Solids and sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, and shall not result in groundwater contamination.
- 9. The solids and sludge treatment and storage site shall have facilities adequate to divert surface water runoff from adjacent areas, to protect the boundaries of the site from erosion, and to prevent drainage from the treatment and storage site. Adequate protection is defined as protection from at least a 100-year storm and protection from the highest possible tidal stage that may occur.
- 10. The discharge of sewage sludge and solids shall not cause waste material to be in a position where it is, or can be, conveyed from treatment and storage areas and deposited in the waters of the state.

F. PRETREATMENT OF INDUSTRIAL WASTE

- 1. The Permittee shall implement and enforce its Publicly Owned Treatment Works (POTW) Pretreatment Program in a manner consistent with 40 CFR Part 403. The Permittee's POTW Pretreatment Program is hereby made an enforceable condition of this Permit. U.S. EPA may initiate enforcement action against an industrial users for noncompliance with applicable standards and requirements as provided in the Act.
- 2. The Permittee shall enforce the requirements promulgated under Sections 307(b), 307(c), 307(d) and 402(d) of the Clean Water Act. The Permittee shall cause industrial users subject to Federal Categorical Standards to achieve compliance no

later than the date specified in those requirements or, in the case of a new industrial user, upon commencement of the discharge.

3. The Permittee shall perform the pretreatment functions as required in 40 CFR Part 403 including, but not limited to:
 - a. Implement the necessary legal authorities as provided in 40 CFR 403.8(f)(1);
 - b. Enforce the pretreatment requirements under 40 CFR 403.5 and 403.6;
 - c. Implement the programmatic functions as provided in 40 CFR 403.8(f)(2); and
 - d. Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR 403.8(f)(3).
4. The Permittee shall submit annually a report to the Regional Water Board and the State Water Board describing the Permittee's pretreatment activities over the previous twelve months. In the event that the Permittee is not in compliance with any conditions or requirements of this Permit, then the Permittee shall also include the reasons for noncompliance and state how and when the discharge shall comply with such conditions and requirements. This annual report is due on February 28th of each year and shall contain, but not be limited to, the following information:
 - a. POTW Influent, Effluent, and Sludge Sampling Results

Sampling results shall include a summary of analytical results from representative, flow-proportioned, 24-hour composite sampling of the POTW's influent and effluent for those pollutants U.S. EPA has identified under Section 307(a) of the Act which are known or suspected to be discharged by industrial users. The Permittee is not required to sample for asbestos until U.S. EPA promulgates an applicable analytical technique under 40 CFR Part 136.

Sludge shall be sampled during the same 24-hour period and analyzed for the same pollutants as the influent and effluent sampling and analysis. The sludge analyzed shall be a composite sample of a minimum of 12 discrete samples taken at equal time intervals over the 24-hour period. This sampling method is applicable to sludge that is dewatered on site and immediately hauled off site for disposal. However, if the sludge is dried in drying beds prior to its final disposal, the sludge composite sample must be from twelve discrete samples collected from twelve representative locations of the drying beds. Wastewater and sludge sampling and analysis shall be performed in accordance with the frequency stated in the waste discharge monitoring requirements.

The Permittee shall also provide any influent, effluent, or sludge monitoring data for nonpriority pollutants which the Permittee believes may be causing or contributing to interference, pass-through, or adversely impacting sludge quality. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto.

b. Upset, Interference, or Pass-through

Include a discussion of upset, interference, or pass-through incidents, if any, at the POTW which the Permittee knows or suspects were caused by industrial users of the POTW system. The discussion shall include the reasons why the incidents occurred, the corrective actions taken, and if known, the name and address of the industrial user(s) responsible. The discussion shall also include a review of the applicable local or federal discharge limitations to determine whether any additional limitations, or changes to existing requirements, may be necessary to prevent pass-through, interference, or noncompliance with sludge disposal requirements.

c. Baseline Monitoring Reports

List the cumulative number of industrial users that the Permittee has notified regarding Baseline Monitoring Reports and the cumulative number of industrial user responses.

d. List of Industrial Users

An updated list of the Permittee's industrial users, including their names and addresses, or a list of deletions and additions keyed to a previously submitted list must be included. The Permittee shall provide a brief explanation for each deletion. The list shall identify the industrial users subject to Federal Categorical Standards by specifying which category(s) of standards are applicable. The list shall indicate which categorical industrial, or specific pollutants from each industry, are subject to local limitations that are more stringent than the Federal Categorical Standards. The Permittee shall also list the noncategorical industrial users that are subject only to local discharge limitations. The Permittee shall characterize the compliance status of each industrial user by employing all applicable descriptions:

- i. In compliance with Baseline Monitoring Report requirements (where applicable);
- ii. Consistently achieving compliance;
- iii. Inconsistently achieving compliance;

- iv. Significantly violated applicable pretreatment requirements as defined by 40 CFR 403.8(f)(2)(vii);
- v. On a compliance schedule to achieve compliance (include the date final compliance is required);
- vi. Not achieving compliance and not on a compliance schedule;
- vii. The Permittee does not know the industrial user's compliance status.

e. Industrial User Inspections and Sampling by POTW

A summary of the inspection and sampling activities conducted by the Permittee during the past year to gather information and data regarding industrial users shall be included. The summary shall consist of:

- i. The names and addresses of the industrial users subject to surveillance by the Permittee and an explanation of whether they were inspected, sampled, or both, and the frequency of these activities at each user; and
- ii. The conclusion or results from the inspection or sampling of each industrial user.

f. Compliance and Enforcement Activities

A summary of the compliance and enforcement activities during the past year shall include the names and addresses of the industrial users affected by the following actions:

- i. Warning letters or notices of violation regarding the industrial user's apparent noncompliance with Federal Categorical Standards or local discharge limitations. For each industrial user, identify whether the apparent violation concerned the Federal Categorical Standards or local discharge limitations;
- ii. Administrative Orders regarding the industrial user's noncompliance with Federal Categorical Standards or local discharge limitations. For each industrial user, identify whether the violation concerned the Federal Categorical Standards or local discharge limitations;

- iii. Civil actions regarding the industrial user's noncompliance with Federal Categorical Standards or local discharge limitations. For each industrial user, identify whether the violation concerned the Federal Categorical Standards or local discharge limitations;
- iv. Criminal actions regarding the industrial users' noncompliance with Federal Categorical Standards or local discharge limitations. For each industrial user, identify whether the violation concerned the Federal Categorical Standards or local discharge limitations;
- v. Assessment of monetary penalties. For each industrial user, identify the amount of penalties;
- vi. Restriction of flow to the POTW; or
- vii. Disconnection from discharge to the POTW.

g. Changes in the Pretreatment Program

Include a description of any significant changes in operating the pretreatment program which differ from the information in the Permittee's approved POTW Pretreatment Program including, but not limited to, changes concerning: the program's administrative structure; local industrial discharge limitations; monitoring program or monitoring frequencies; legal authority or enforcement policy; funding mechanisms; resource requirements; or staff levels.

h. A summary of the Annual Pretreatment Budget

Attach a summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases.

i. Public Participation Activities

Attach a copy of the public notice as required in 40 CFR 403.8(f)(2)(vii). If no notice was published, explain why.

j. Additional Information

Include a description of any changes in sludge disposal methods and a discussion of any concerns not described elsewhere in the report.

5. The Permittee shall submit quarterly compliance reports to the Regional and State Boards. The reports shall cover the periods January through March, April through June, July through September, and October through December. Each report shall be submitted by the end of the month following the quarter, except that the report for October through December may be included in the annual report. This

quarterly reporting requirement shall commence for the first full quarter following issuance of this Permit. The reports shall identify:

- a. All SIUs which violated any standards or reporting requirements during that quarter;
- b. What were the violations (distinguish between categorical and local limits);
- c. What enforcement actions were taken; and
- d. The status of active enforcement actions from previous periods, including closeouts (facilities under previous enforcement actions which attained compliance during the quarter).

Signed copies of the reports shall be submitted to the Regional and State Water Boards and to the U.S. EPA the following addresses:

California Regional Water Quality Control Board
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 95403

Pretreatment Program Manager
Regulatory Section
Division of Water Quality
State Water Resources Control Board
P.O. Box 944213
Sacramento, CA 94244-2130

Regional Administrator
U.S. EPA – Region IX
Attn: W-5
75 Hawthorne Street
San Francisco, CA 94105

G. GENERAL PROVISIONS

1. Duty to Comply

The Permittee must comply with all of the conditions of this Permit. Any Permit noncompliance constitutes a violation of the Clean Water Act and the Porter-Cologne Water Quality Control Act and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or denial of a Permit renewal application. [40 CFR 122.41(a)]

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if

this Permit has not yet been modified to incorporate the requirement. [40 CFR 122.41(a)(1)]

2. Duty to Reapply

This Permit expires on May 15, 2008. If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittee must apply for and obtain a new Permit. The application, including a report of waste discharge in accordance with Title 23, California Code of Regulations must be received by the Regional Water Board no later than November 15, 2007. [40 CFR 122.41(b)]

The Regional Administrator of the U.S. EPA or the Regional Water Board Executive Officer may grant permission to submit an application at a later date prior to the Permit expiration date; and the Regional Administrator of the U.S. EPA or Regional Water Board Executive Officer may grant permission to submit the information required by paragraphs (g)(7), (9), and (10) of 40 CFR 122.21 after the Permit expiration date. [40 CFR 122.21(d)(1)]

3. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit. [40 CFR 122.41(c)]

4. Duty to Mitigate

The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this Permit that has a reasonable likelihood of adversely affecting human health or the environment. [40 CFR 122.41(d)]

5. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Permittee to achieve compliance with this Permit. Proper operation and maintenance includes adequate laboratory control and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Permittee only when necessary to achieve compliance with the conditions of this Permit. [40 CFR 122.41(e)]

6. Permit Actions

This Permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

- a. Violation of any terms or conditions of this Permit; or
- b. Obtaining this Permit by misrepresentation or failure to disclose fully all relevant facts; or

- c. A change in any condition that requires either a temporary or a permanent reduction or elimination of the authorized discharge; or
- d. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by Permit modification or termination.

If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this Permit, this Permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the Permittee so notified. [40 CFR 122.44(b)]

The filing of a request by the Permittee for a Permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any Permit condition. [40 CFR 122.41(f)]

7. Property Rights

This Permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. [40 CFR 122.41(g)]

8. Duty to Provide Information

The Permittee shall furnish the Regional Water Board, State Water Board, or U.S. EPA, within a reasonable time, any information which the Regional Water Board, State Water Board, or U.S. EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit or to determine compliance with this Permit. The Permittee shall also furnish to the Regional Water Board, upon request, copies of records required to be kept by this Permit. [40 CFR 122.41(h)]

The Permittee shall conduct analysis on any sample provided by U.S. EPA as part of the Discharge Monitoring Quality Assurance (DMQA) program. The results of any such analysis shall be submitted to U.S. EPA's DMQA manager.

9. Inspection and Entry

The Permittee shall allow the Regional Water Board, State Water Board, U.S. EPA, and/or other authorized representatives upon the presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;

- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any locations. [40 CFR 122.41(i)]

10. Monitoring and Records

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- b. The Permittee shall calibrate and perform maintenance procedures in accordance with manufacturer's specifications on all monitoring instruments and equipment to ensure accurate measurements. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Permit, and records of all data used to complete the application for this Permit, for a period of at least three years from the date of the sample, measurement, report, or application. This period may be extended by request of the Regional Water Board, State Water Board, or U.S. EPA at any time. All monitoring instruments and devices used by the Permittee to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary, at least annually to ensure their continued accuracy.
- c. Records of monitoring information shall include:
 - i. The date, exact place, and time of sampling or measurements;
 - ii. The individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;
 - iv. The individual(s) who performed the analyses;
 - v. The analytical techniques or methods used;
 - vi. The results of such analyses.
 - vii. The method detection limit (MDL); and
 - viii. The practical quantitation level (PQL) or the limit of quantitation (LOQ).
- d. Unless otherwise noted, all sampling and sample preservation shall be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association). All analyses must be conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in this Permit or approved by the Executive Officer of the Regional Water Board. Unless otherwise specified, all metals shall be reported as total metals. Test fish for bioassays and test temperatures shall be specified by the Executive Officer of the Regional Water Board. Bioassays shall be performed in accordance with guidelines approved by the Regional Water Board and the Department of Fish and Game.

11. Signatory Requirements

- a. All Permit applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or U.S. EPA shall be signed by either a principal executive officer or ranking elected official. [40 CFR 122.22(a)]
- b. Reports required by this Permit, other information requested by the Regional Water Board, State Water Board, or U.S. EPA, and Permit applications submitted for Group II storm water discharges under 40 CFR 122.26(b)(3) may be signed by a duly authorized representative provided:
 - i. The authorization is made in writing by a person described in paragraph (a) of this provision;
 - ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company; and
 - iii. The written authorization is submitted to the Regional Water Board prior to or together with any reports, information, or applications signed by the authorized representative. [40 CFR 122.22(b)(c)]
- c. Any person signing a document under paragraph (a) or (b) of this provision shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." [40 CFR 122.22(d)]

12. Reporting Requirements

- a. Planned changes: The Permittee shall give notice to the Regional Water Board as soon as possible of any planned physical alteration or additions to the permitted facility. Notice is required under this provision only when:
 - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or

- ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the Permit, nor the notification requirements under **G. GENERAL PROVISION 12 (e)**.
- b. Anticipated noncompliance: The Permittee shall give advance notice to the Regional Water Board of any planned changes in the permitted facility or activity which may result in noncompliance with Permit requirements.
- c. Monitoring reports: Monitoring results shall be reported at the intervals specified in the self monitoring program. By February 28 of each year, the Permittee shall submit an annual report to the Regional Water Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the Permittee shall discuss the compliance record and the corrective actions taken or planned which may be needed to bring the discharge into full compliance with the Permit. If the Permittee monitors any pollutant more frequently than required by this Permit, using test procedures approved under 40 CFR Part 136 or as specified in this Permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
- d. Compliance schedules: Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than 14 days following each schedule date.
- e. Noncompliance reporting: The Permittee shall report any noncompliance at the time monitoring reports are submitted. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance.
- f. The following events shall be reported orally as soon as the Permittee becomes aware of the circumstances, and the written report shall be provided within five days of that time.
 - i. Any unanticipated bypass that violates any prohibition or exceeds any effluent limitation in the Permit.
 - ii. Any upset that exceeds any effluent limitation in the Permit.
 - iii. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Regional Water Board in this Permit.
 - iv. Any noncompliance that may endanger health or the environment.

The Executive Officer may waive the above-required written report.

- g. Other information: Where the Permittee becomes aware that it failed to submit any relevant facts in a Permit application, or submitted incorrect information in a Permit application or in any report to the Regional Water Board, the Permittee shall promptly submit such facts or information.
[40 CFR 122.41(1)]

13. Bypass

- a. Definitions:
 - i. Bypass [as defined in 40 CFR 122.41(m)] is the intentional diversion of waste streams from any portion of a treatment facility.
 - ii. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- b. Bypass not exceeding limitations. The Permittee may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance or in accordance with an operating plan approved by the Executive Officer to assure efficient operation. These bypasses are not subject to the provisions of parts c and d of this section.
- c. Notice
 - i. Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least ten days before the date of the bypass.
 - ii. Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required in **G. GENERAL PROVISIONS** 12.f. of this Permit.
- d. Prohibition of bypass
 - i. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Permittee for bypass, unless:
 - (A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and

(C) The Permittee submitted notices as required under
G. GENERAL PROVISION 13.c. of this Permit.

- ii. The Executive Officer may approve an anticipated bypass, after considering its adverse effects, if the Executive Officer determines that it will meet the three conditions listed above in
G. GENERAL PROVISION 13.d.i. above.

14. Upset

- a. Definition. Upset [as defined in 40 CFR 122.41(n)] is an exceptional incident in which there is unintentional and temporary noncompliance with technology-based Permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based Permit effluent limitations if the requirements of (c), below, are not met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for a demonstration of upset. A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - i. An upset occurred and that the Permittee can identify the cause(s) of the upset;
 - ii. The permitted facility was at the time being properly operated;
 - iii. The Permittee submitted notice of the upset as required in
G. GENERAL PROVISION 12.f. of this Permit; and
 - iv. The Permittee complied with any remedial measures required under paragraph (d) of this section.
- d. Burden of proof. In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

15. Enforcement

The Clean Water Act provides that any person who violates a Permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a civil penalty not to exceed \$25,000 per day of violation. Any person who negligently violates Permit conditions implementing Sections 301, 302, 306, 307, or 308 of the Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment of not more than one

year, or both. Higher penalties may be imposed for knowing violations and for repeat offenders. The Porter-Cologne Water Quality Control Act provides for civil and criminal penalties comparable to, and in some cases greater than, those provided under the Clean Water Act.

16. Availability

A copy of this Permit shall be maintained at the discharge facility and be available at all times to operating personnel.

17. Change in Discharge

In the event of a material change in the character, location, or volume of a discharge, (including any point or nonpoint discharge to land or groundwater) the Permittee shall file with this Regional Water Board a new report of waste discharge at least 180 days before making any such change. [CWC Section 13376]. A material change includes, but is not limited to, the following:

- a. Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the waste.
- b. Significant change in disposal method, e.g., change from a land disposal to a direct discharge to water, or change in the method of treatment which would significantly alter the characteristics of the waste.
- c. Significant change in the disposal area, e.g., moving the discharge to another drainage area, to a different water body, or to a disposal area, significantly removed from the original area, potentially causing different water quality or nuisance problems.
- d. Increase in area or depth to be used for solid waste disposal beyond that specified in the waste discharge requirements. [CCR Title 23 Section 2210]

18. Severability

Provisions of these waste discharge requirements are severable. If any provision of these requirements is found invalid, the remainder of these requirements shall not be affected.

19. Monitoring

The Regional Water Board or State Water Board may require the Permittee to establish and maintain records, make reports, install, use, and maintain monitoring equipment or methods (including where appropriate biological monitoring methods), sample effluent as prescribed, and provide other information as may be reasonably required. [CWC Section 13267 and 13383].

The Permittee must comply with the Contingency Planning and Notification Requirements Order No. 74-151 and the Monitoring and Reporting Program No. R1-2003-0045 and any modifications to these documents as specified by the Executive Officer. Such documents are attached to this Permit and incorporated

herein. The Permittee shall file with the Regional Water Board technical reports on self monitoring work performed according to the detailed specifications contained in any monitoring and reporting program as directed by the Regional Water Board.

Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. In the event a certified laboratory is not available to the Permittee, analyses performed by a noncertified laboratory will be accepted provided a quality assurance/quality control program is instituted by the laboratory, and a manual containing the steps followed in this program is kept in the laboratory and made available for inspection by staff of the Regional Water Board. The quality assurance/quality control program must conform to U.S. EPA or State Department of Health Services guidelines.

All Discharge Monitoring Reports shall be sent to:

California Regional Water Quality Control Board
North Coast Region
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 95403

U.S. EPA, Region 9
Attn: WTR-7, NPDES/DMR
75 Hawthorne Street
San Francisco, CA 94105

20. National Pretreatment Standards: Prohibited Discharges

- a. General prohibitions. Pollutants introduced into POTWs by a nondomestic source shall not pass through [40 CFR403.3(n)] the POTW or interfere [40 CFR 403.3(i)] with the operation or performance of the works. These general prohibitions and the specific prohibitions in paragraph (b) of this provision apply to all nondomestic sources introducing pollutants into a POTW whether or not the source is subject to other National Pretreatment Standards or any national, state, or local Pretreatment Requirements.
- b. Specific prohibitions. In addition, the following pollutants shall not be introduced into a POTW:
 - i. Pollutants which create a fire or explosion hazard in the POTW;
 - ii. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works is specifically designed to accommodate such discharges;
 - iii. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in interference:

- iv. Any pollutant, including oxygen demanding pollutants (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW; and
 - v. Heat in amounts which will inhibit biological activity in the POTW resulting in interference, but in no case heat in such quantities that the temperature at the POTW Treatment Plant exceeds 40°C (104°F) unless the Regional Water Board upon request of the POTW approves alternate temperature limits.
 - vi. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
 - vii. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;
 - viii. Any trucked or hauled pollutant, except at discharge points designated by the POTW.
- c. When specific limits must be developed by a POTW.
- i. POTWs developing POTW Pretreatment Programs pursuant to 40 CFR 403.8 shall develop and enforce specific limits to implement the prohibitions listed in paragraphs (a) and (b) of this provision.
 - ii. All POTWs shall, in cases where pollutants contributed by User(s) result in interference or pass-through, and such violation is likely to recur, develop and enforce specific effluent limits for Industrial User(s), and all other users, as appropriate, which, together with appropriate changes in the POTW Treatment Plant's facilities or operations, are necessary to ensure renewed and continued compliance with the POTW's NPDES Permit or sludge use or disposal practices.
 - iii. Specific effluent limits shall not be developed and enforced without individual notice to persons or groups who have requested such notice and an opportunity to respond.
- d. Local limits. Where specific prohibitions or limits on pollutants or pollutant parameters are developed by a POTW in accordance with paragraph (c) above, such limits shall be deemed Pretreatment Standards for the purposes of Section 307(d) of the Clean Water Act. [40 CFR 403.5(a) through (d)]

21. Operator Certification

Supervisors and operators of municipal wastewater treatment plants shall possess a certificate of appropriate grade in accordance with Title 23, California Code of Regulations, Section 3680. The State Water Board may accept experience in lieu of qualification training. In lieu of a properly certified wastewater treatment plant operator, the State Water Board may approve use of a water treatment plant

operator of appropriate grade certified by the State Department of Health Services where water reclamation is involved.

22. Adequate Capacity

Whenever a publicly owned wastewater treatment plant will reach capacity within four years, the Permittee shall notify the Regional Water Board. A copy of such notification shall be sent to appropriate local elected officials, local permitting agencies, and the press. The Permittee must demonstrate that adequate steps are being taken to address the capacity problem. The Permittee shall submit a technical report to the Regional Water Board showing how flow volumes will be prevented from exceeding capacity, or how capacity will be increased, within 120 days after providing notification to the Regional Water Board, or within 120 days after receipt of Regional Water Board notification, that the POTW will reach capacity within four years. The time for filing the required technical report may be extended by the Regional Water Board. An extension of 30 days may be granted by the Executive Officer, and longer extensions may be granted by the Regional Water Board itself. [CCR Title 23, Section 2232]

23. Acute Toxicity Control Provision

Compliance with the Basin Plan narrative toxicity objective shall be achieved in accordance with the following:

Testing procedures specified in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (U.S. EPA Report No. EPA 600/4-90-027F, 4th edition or subsequent editions), or other methods approved by the Executive Officer, shall be used.

If the result of any single acute toxicity test is less than 70% survival, the Permittee shall take two more samples, one within 14 days, and one within 21 days of receiving the sample results. If two of the three samples do not comply with the acute toxicity effluent limitation, the Permittee shall initiate a Toxicity Identification Evaluation (TIE) in accordance with **G. GENERAL PROVISION 25**. If the two additional samples are in compliance with the acute toxicity effluent limitation, then a TIE will not be required. If the discharge has ceased before the additional samples could be collected, the Permittee shall contact the Executive Officer within 21 days with a plan to demonstrate compliance with the acute toxicity effluent limitation.

24. Chronic Toxicity Control Provision

Compliance with the Basin Plan narrative toxicity objective shall be achieved in accordance with the following:

- a. Testing procedures specified in Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms (U.S. EPA Report, EPA/600/4-91/003, 2nd Edition, July 1994 or subsequent editions), Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to

Freshwater Organisms (U.S. EPA Report No. EPA-600-4-91-002, 3rd or subsequent editions), or other methods approved by the Executive Officer, shall be used.

- b. If the result of any single chronic toxicity test does not comply with the chronic toxicity effluent limitation, the Permittee shall take two more samples, one within 14 days, and one within 21 days of receiving the sample results. If two of the three samples do not comply with the chronic toxicity limitation, the Permittee shall initiate a Toxicity Identification Evaluation (TIE) in accordance with **G. GENERAL PROVISION 25**. If the two additional samples are in compliance with the chronic toxicity requirement, then a TIE will not be required. If the discharge has ceased before the additional samples could be collected, the Permittee shall contact the Executive Officer within 21 days with a plan to demonstrate compliance with the chronic toxicity effluent limitation.
- c. Chronic Toxicity Screening Phase Requirements
 - i. The Permittee shall perform screening phase monitoring at the start of its chronic toxicity monitoring program;
 - ii. Design of the screening phase shall, at a minimum, consist of the following elements:
 - (A) At least three test species with approved test protocols shall be used to measure compliance with the toxicity objective;
 - (B) If possible, the test species shall include a vertebrate, an invertebrate, and an aquatic plant;
 - (C) Use of test species specified in Tables 5 of the SIP and the list in Appendix II of the 1997 Ocean Plan, and use of the protocols referenced therein, or as approved by the Executive Officer;
 - (D) Appropriate controls; and
 - (E) Concurrent reference toxicant tests.
 - iii. After conducting the screening phase, the Permittee may petition the Executive Officer to reduce the required testing to the most sensitive specie(s).

25. Toxicity Identification and Source Reduction Evaluations for Acute and Chronic Toxicity

The Permittee shall take steps necessary to identify and reduce the source of the toxicity in the effluent, if the discharge consistently exceeds an acute limit or a chronic trigger. The Toxicity Identification Evaluation shall be conducted in accordance with the *Methods for Aquatic Toxicity Identification Evaluations: Phases I-III* (EPA Publication 600/6-91/003, February 1991) or other methods approved by the Executive Officer. The Toxicity Reduction Evaluation shall be conducted in accordance with the *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA 600/2-88/070, April 1989) or the *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA 883-B-99-002, August 1999) or other methods approved by the

Executive Officer. Once the source of toxicity is identified, the Permittee shall take all reasonable steps necessary to reduce toxicity to the required level.

26. Pollutant Minimization Program

The Permittee must develop a Pollutant Minimization Program if all of the following conditions are met.

- a. The effluent limitation is less than the reported Minimum Level, and
- b. The concentration of the pollutant is reported as DNQ¹, and
- c. There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation.

or

- a. The effluent limitation is less than the Method Detection Limit, and
- b. The concentration of the pollutant is reported as ND, and
- c. There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation.

The completion and implementation of a Pollution Prevention Plan, required in accordance with CWC Section 13263.3 (d) will fulfill the requirements of a Pollution Minimization Program. A Pollutant Minimization Program shall include the following actions and submittals, although the Regional Board may establish additional requirements.

- a. An annual review and semi annual monitoring of potential sources of the reportable pollutant.
- b. Quarterly monitoring for the reportable pollutant in the influent to the wastewater treatment facility.
- c. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable pollutant in the effluent at or below the effluent limitation.
- d. Implementation of appropriate cost effective control measures for the pollutant, consistent with the control strategy.
- e. An annual status report, submitted to the Regional Board, which contains:
 - i. All Pollutant Minimization Program monitoring results for the previous year;
 - ii. A list of potential sources of the reportable pollutant;

¹ Detected, but not Quantified

- iii. A summary of all action steps taken in accordance with the control strategy; and
- iv. A description of actions to be taken in the following year.

27. Reopener

The Regional Water Board may modify, or revoke and reissue, this Order and Permit if present or future investigations demonstrate that the Permittee governed by this Order is causing or significantly contributing to, adverse impacts on water quality and/or beneficial uses of receiving waters.

Certification

I, Susan A. Warner, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on May 15, 2003.

Susan A. Warner
Executive Officer